

QUANTIFIED PROPOSAL – BASED ON CRITERIA OF
CLIMATE JUSTICE PER CAPITA - OF THE
DISTRIBUTION AMONG THE UNFCCC STATE PARTIES
OF THE EMISSIONS MITIGATION GLOBAL OBJECTIVE
DEFINED BY SCENARIO RCP2.6 OF THE IPCC'S AR5

**“THE CARBON BUDGETS THAT
WILL PREVENT THE AVERAGE
TEMPERATURE OF THE EARTH’S
SURFACE FROM INCREASING BY
MORE THAN 2°C WHEN COMPARED
WITH THE TEMPERATURE OF
THE PRE-INDUSTRIAL ERA”**

**FACT SHEET CMA 1:
MEDITERRANEAN
2°C REFERENCE
SCENARIOS**



GGCC GROUP GOVERNANCE CLIMATE CHANGE

STH. Sustainability, Technology and Humanism
UPC Singular Research Group

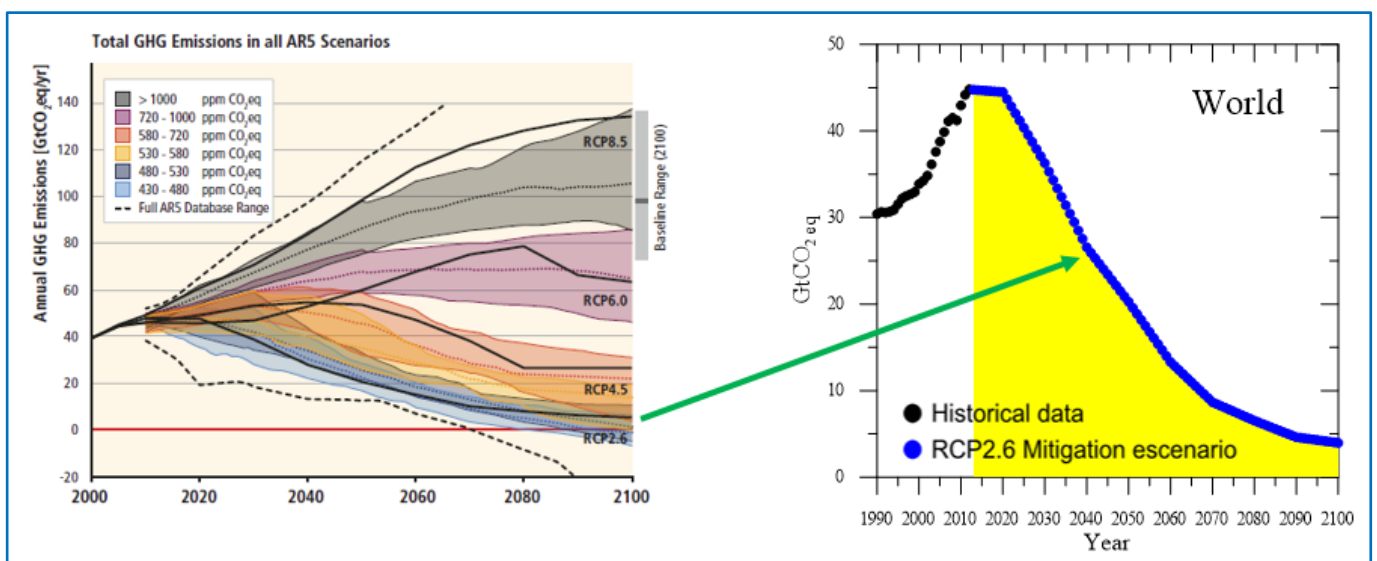
UNIVERSITAT POLITÈCNICA DE CATALUNYA

MARRAKESH 2016 – CMA 1

THE GLOBAL CARBON BUDGET FRAME

✚ The name GLOBAL CARBON BUDGET refers to the total amount of CO₂ emissions that can still be released into the atmosphere in accordance with the criterion of not exceeding an increase of 2°C of the Earth's surface temperature, as estimated by the Intergovernmental Panel on Climate Change, IPCC, in its Fifth Assessment Report, AR5.

✚ From all the Representative Concentration Pathways (RCP's) future scenarios considered, only one of them has a "likely" probability to achieve this objective: the RCP2.6 scenario.



✚ The most important element of the CO₂ - RCP2.6 scenario is not so much its trajectory over time, but rather the surface that it defines, and which quantifies the GLOBAL CARBON BUDGET: approximately 1000 GtCO₂ -the Cumulative CO₂ emissions consistent with the goal of keeping the global average temperature rise below 2°C with > 66% probability (AR5 IPCC).

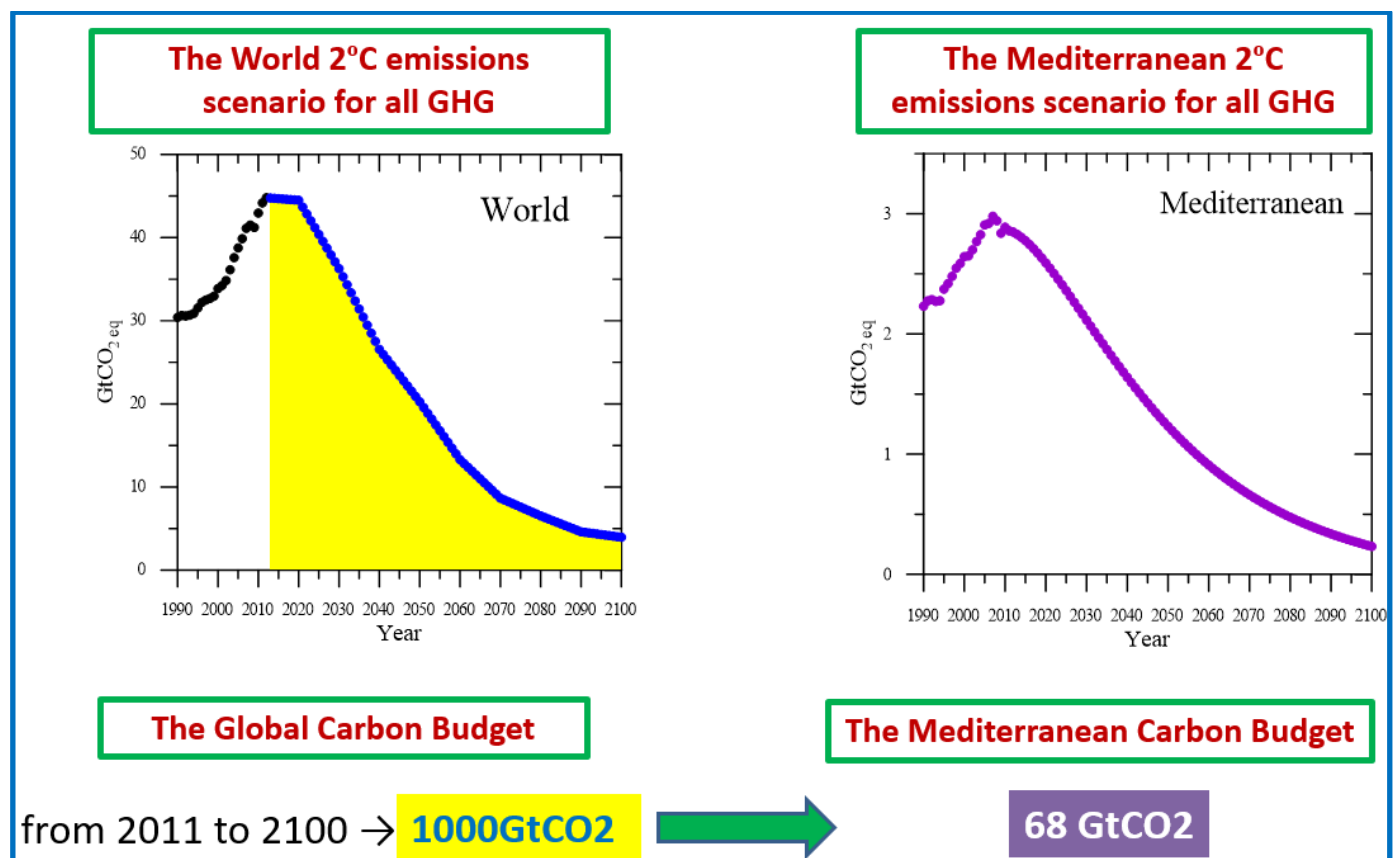
DISTRIBUTING THE GLOBAL CARBON BUDGET WITH EQUITY OR CLIMATE JUSTICE

✚ There are several manners to introduce ethical concepts like EQUITY or CLIMATE JUSTICE in a computer with the aim to calculate a "fair" distribution of the "Global Carbon Budget" among the UNFCCC state parties. The results presented here have been obtained applying our Model of Climate Justice per capita, MCJ. See also our Fact Sheet II.

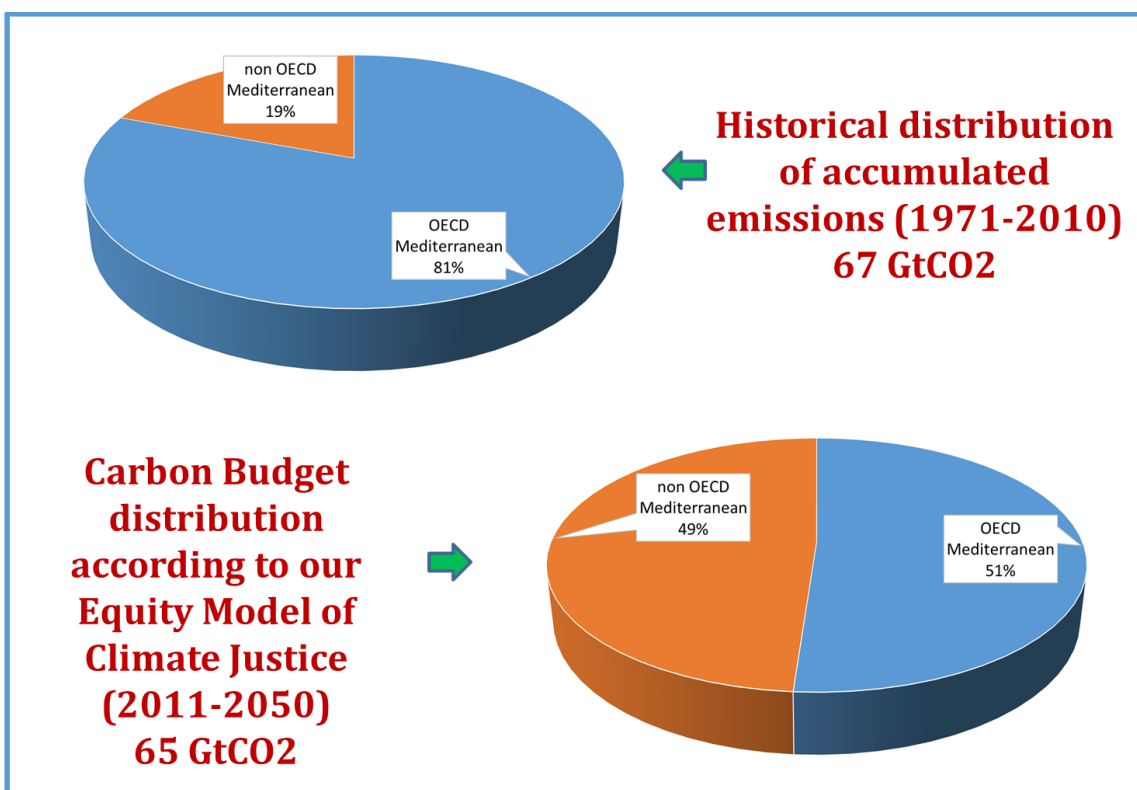
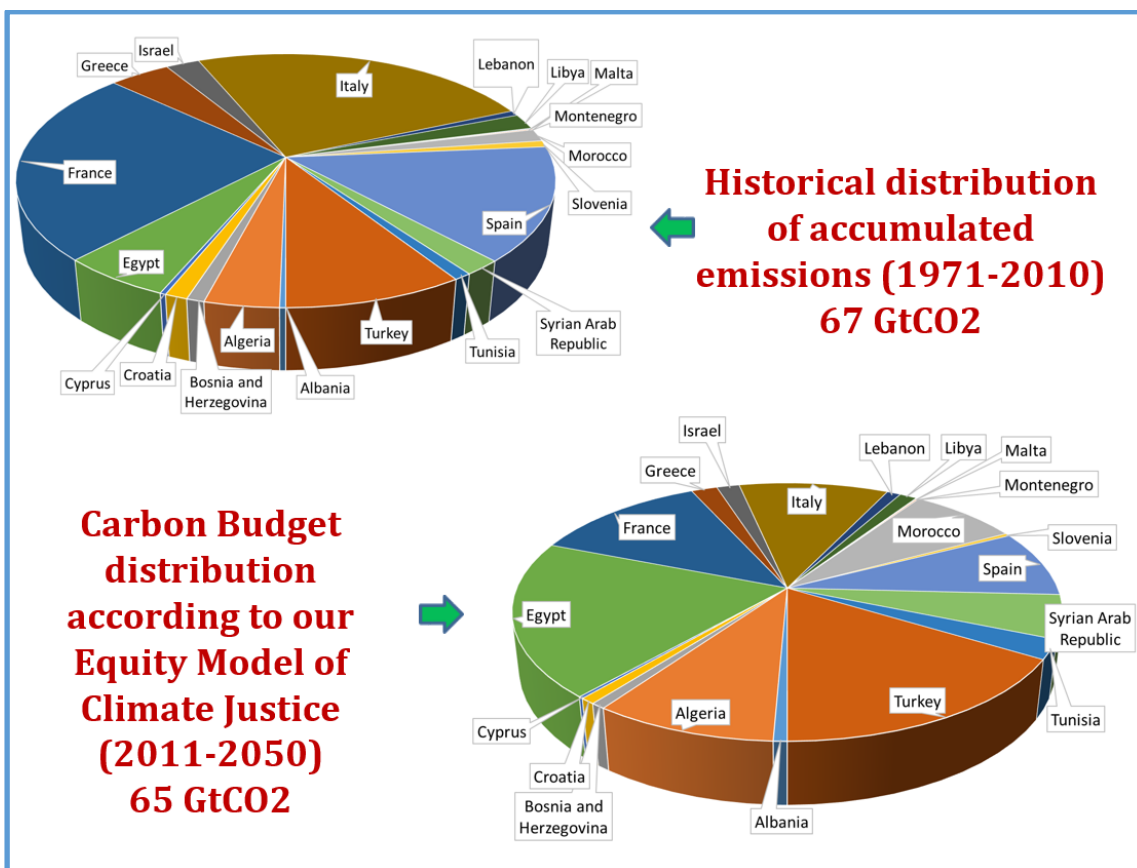
TO TRANSLATE THE WORLD 2°C REFERENCES TO REGIONAL/COUNTRY LEVELS

- ✚ The RCP2.6 scenario and the Global Carbon Budget are the World references that we have to follow in order to achieve the 2°C goal.
- ✚ It's necessary to translate these two references to different regions and/or countries:
 - These “country specific 2°C reference scenarios” have to be available before countries produce their second NDCs (2020) because they could be used as a common reference for everyone.
- ✚ The Paris agreement “will be implemented to reflect equity”. And in its preamble the importance for some of the concept of “climate justice” is noted.
 - In any case, from an equity perspective, “the specific 2°C reference scenarios for regions or countries” must lead to the same final quantity of emissions per capita.

THE MEDITERRANEAN 2°C REFERENCE SCENARIO



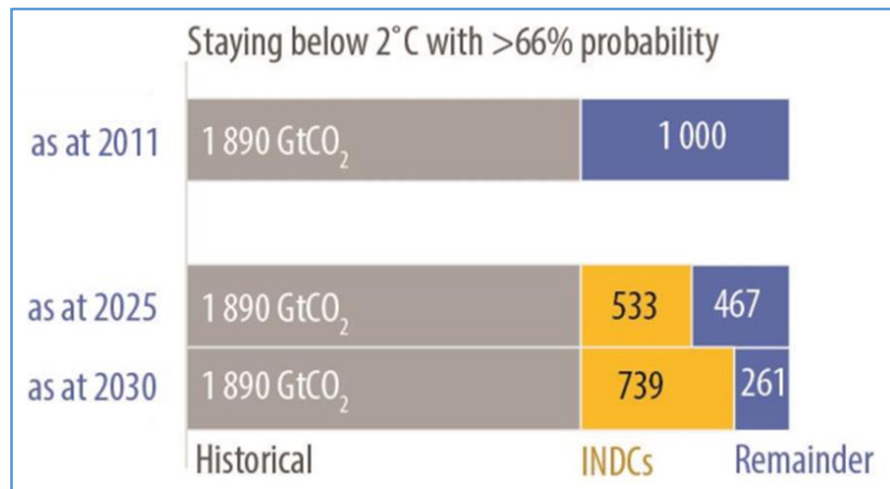
THE PARADIGM SHIFT THAT OUR EQUITY OR CLIMATE JUSTICE METHODOLOGY ENTAILS



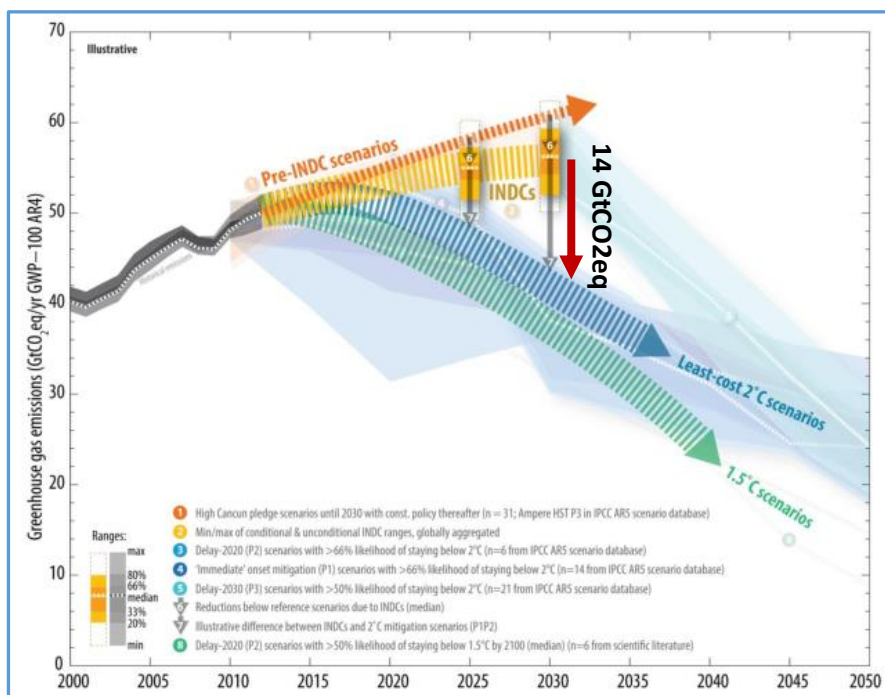
UNFCCC INDCs EVALUATION in the context of the Global Carbon Budget framework

✚ The major¹ official report on the INDCs have finally analyzed the aggregate effect of the INDCs under the focus of the RCPs pathways (IPCC AR5) and, mainly, the Global Carbon Budget paradigm!

- In the last update¹ (02-05-16) of the UNFCCC Synthesis report, we can see the following figure and we can conclude that **the current INDCs pathways until 2030 will consume 75% of the available Global Carbon Budget 2011-2100 for staying below 2°C**



- And we can also conclude according other figure of this update that **there is a big gap between the current INDCs and the level of compromises required to achieve the objectives set out in Paris!**

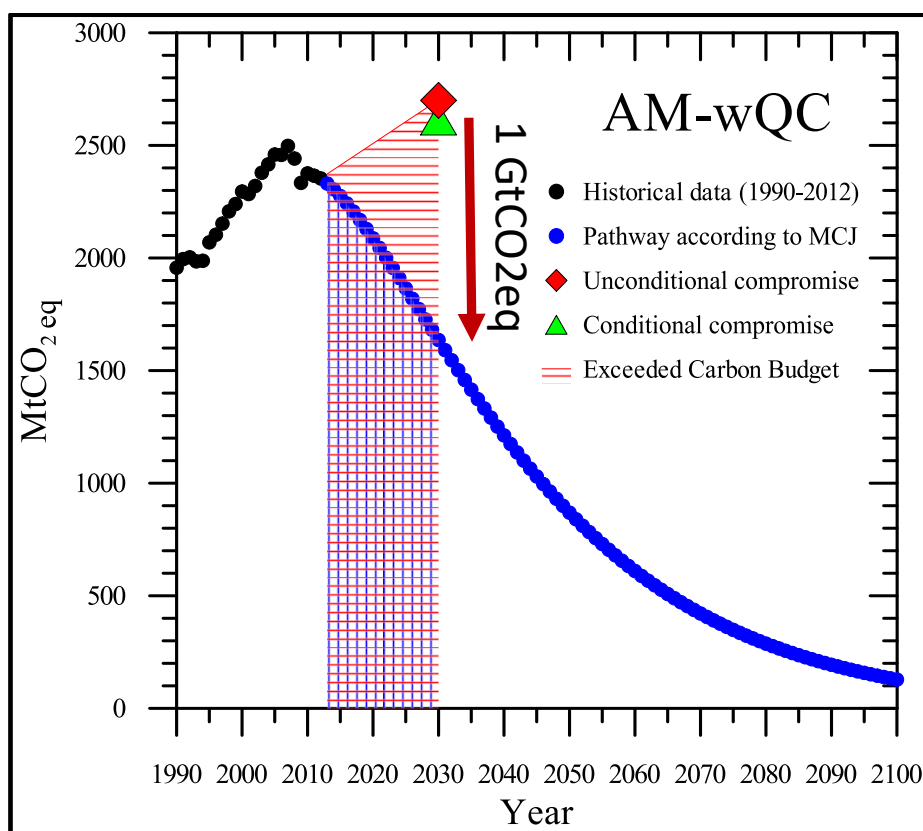


¹ UNFCCC Synthesis report on the aggregate effect of INDCs. http://unfccc.int/focus/indc_portal/items/9240.php

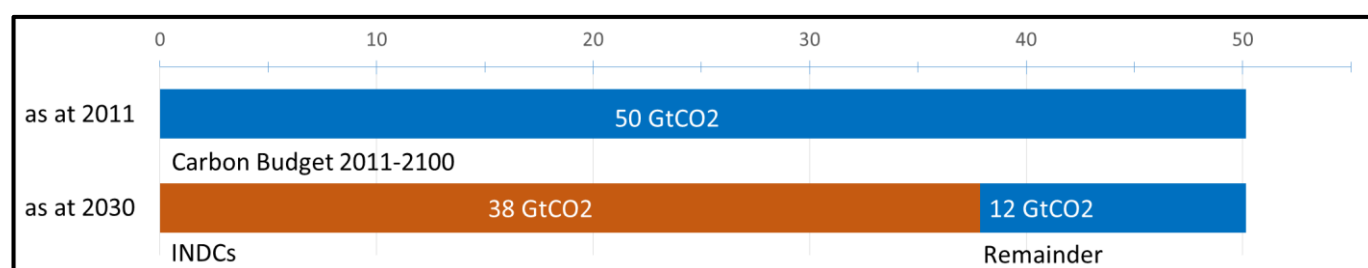
Results of the GGCC evaluation of the INDCs:

1. Aggregate of Mediterranean countries, which submitted INDC with Quantifiable Compromises, AM-wQC

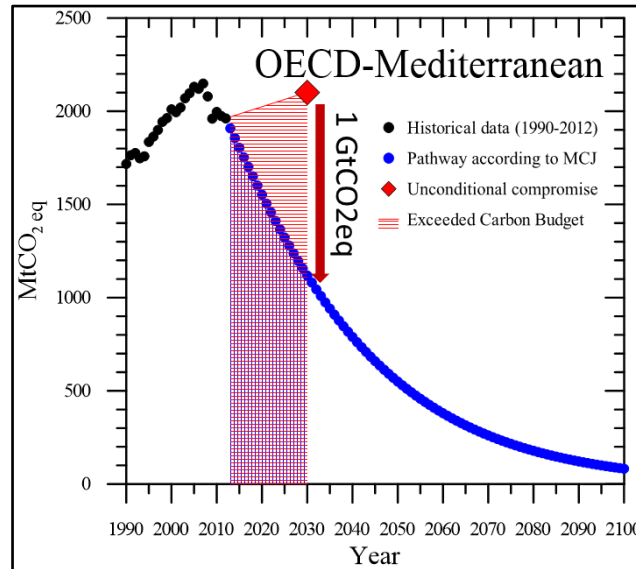
AM-wQC		
Albania	Greece (EU28)	Morocco
Algeria	Israel	Slovenia (EU28)
Bosnia and Herzegovina	Italy (EU28)	Spain (EU28)
Croatia (EU28)	Lebanon	Tunisia
Cyprus (EU28)	Malta (EU28)	Turkey
France (EU28)	Montenegro	



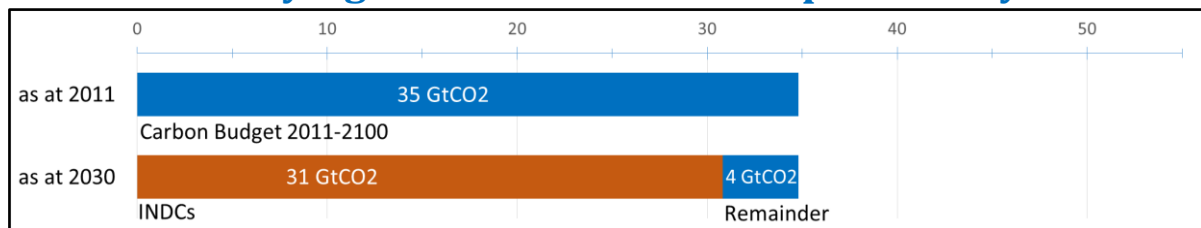
Staying below 2°C with >66% probability



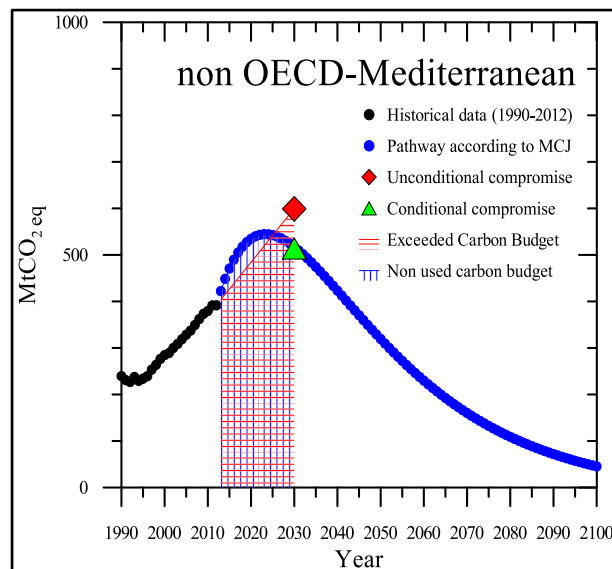
2. The OECD- Mediterranean countries



Staying below 2°C with >66% probability



3. The non OECD- Mediterranean countries



Staying below 2°C with >66% probability



CONCLUSIONS OF THE GGCC MEDITERRANEAN INDCs ANALYSIS

- ✚ Generally speaking, the contributions of the Mediterranean countries (AM-wQC) are far away from the 2°C goal:
 - In 2030, there will be a gap of 1GtCO₂eq = 1000 MtCO₂eq between the 2°C reference scenario and the aggregate contributions of the INDCs.
 - 76% of their carbon budget (2011-2100) will be spent from now to 2030.
- ✚ There is a substantial difference when we look at the differences between developed and developing countries:
 - The OECD-members are mainly responsible for the 1GtCO₂eq = 1000 MtCO₂eq gap. 88% of their carbon budget (2011-2100) will be spent from now to 2030.
 - The Non OECD members are quite close to the 2°C track. 47% of their carbon budget (2011-2100) will be spent from now to 2030.

CONCLUSIONS AND PROPOSALS RELATED WITH THE FUTURE 2ⁿ NDCs OF THE MEDITERRANEAN REGION

- ✚ It's extremely important to have references in order to assess if a country (or a region) is on track for the 2°C goal.
- ✚ Good 2°C references at a global level are the RCP2.6 future emission scenario and their associated Global Carbon Budget.
- ✚ Based on Equity and Climate Justice criteria it's fully possible to translate these two global references to the Mediterranean region and countries.
- ✚ The Carbon Budget for the Mediterranean Region (M-CB) amounts to 68GtCO₂, which has historically been and still is unequally emitted by the OECD and non-OECD Mediterranean countries.
- ✚ Using these approaches and methodologies it is possible and necessary to quantitatively formulate a specific Mediterranean Policy of cooperation in the fight against Climate Change!